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Putting Energy Conservation to Work:

American Attitudes on Conservation and Government Programs to Encourage More Efficient Energy Use

UNION CARBIDE

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American Attitudes on Conservation and Government Programs to Encourage More Efficient Energy Use

A Survey Conducted by
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Preface

America's continuing reliance on imported oil compromises our national security, weakens the dollar in foreign exchange, and fuels inflation here at home. Yet oil imports today are nearly twice what they were in 1972. In 1980, the U.S. will buy almost half its oil abroad.

Despite virtual consensus among energy policy analysts that conservation is the only viable response to this challenge in the near term, Americans have been reluctant to embrace conservation as a tenet of the nation's energy policy. The energy efficiency of the economy overall *has* improved by 10 percent since 1973 according to one analysis. But more than 60 percent of this improvement is attributable to conservation by industry, which uses only 37 percent of the nation's energy. Clearly, much more remains to be done.

Union Carbide commissioned a national attitude survey to test public support for enlarging conservation's role in the nation's near-term energy policy. We believe a national commitment to energy conservation will not only reduce America's dependence on foreign oil, but also help ensure the availability of the energy and energy raw materials on which much of Union Carbide's business is based. The survey reveals a substantial constituency for conservation and points to new public policies to help put conservation to work.

The survey was conducted by Roger Seasonwein Associates of New Rochelle, New York. It is a national probability sample of 1,000 adults interviewed by telephone between November 5th and 25th, 1979. The highlights from the survey appearing in this booklet were prepared by the staff of Union Carbide and reviewed for accuracy by Roger Seasonwein Associates. All survey questions and results for the total sample appear in the appendix, as well as a note on rounding and sampling error. Demographic breakdowns of the results are available from Union Carbide on request.

Executive Summary

- Americans agree on the need to reduce the nation's energy use and expect improvements in energy efficiency to achieve much of this saving. But they also expect that saving energy will require cutbacks in standards of living, and express concern about the equity with which these sacrifices will be distributed.

- Americans support a pluralistic approach to the nation's energy future without undue reliance on any single energy option. Conservation is considered the fastest way to improve the nation's energy situation and is seen as one of the cheapest and most environmentally acceptable of the nation's energy options. Its overall rating puts it in the middle of the six alternatives measured.

- Homeowners consider cost the single most important obstacle they face in improving the energy efficency of their homes. Of those who have made investments to improve the efficiency of their homes in the last two years, only three percent indicated that the present tax incentives for residential conservation played a major role in their decision. Up to 40 percent of America's homes could be candidates for significant new or expanded conservation investments if a government incentive of $750 is provided.

- Americans feel that industry as well as government and "the average person" will help conserve energy. A majority believes that energy prices, rather than government regulation, will induce industry to save energy. But a majority would support government incentives for industrial conservation if they were convinced such incentives would actually result in substantial new conservation by industry.

1 How do Americans define energy conservation?

Many energy policy analysts are convinced that conservation will play a critical part in reducing the nation's dependence on imported oil. Yet Americans' conservation performance has been modest, at least in part because many people question the validity of the energy crisis itself.

While some Americans may still consider the energy issue to be a fabrication, many are nonetheless aware of the need to reduce energy use (Table 1). Eighty-three percent of the public believes America should reduce its energy use at least "a fair amount" in the future years.

Table 1: Is it your feeling that this country in future years should reduce the amount of energy it uses a great deal, a good deal, a fair amount, not too much, or not at all?

Great or good deal	**48%**
Great deal	27
Good deal	21
Fair amount	**35**
Not too much or not at all	**15**
Not too much	7
Not at all	7
Don't know	**3**

Base: Total sample

How is this reduction to be achieved? When asked only if cutbacks in lifestyles will be necessary, Americans are about evenly divided (Table 2). But when asked what proportion of major energy savings would come from improved energy efficiency, 58 percent say a "great or good deal" (Table 3), almost twice the 30 percent who think cutbacks in living standards will account for this much of the savings. On balance, Americans see more energy savings coming from improved efficiency than cutbacks, but cutbacks are seen as having an important role.

Table 2: Is it your feeling that major savings in energy use in this country would make it necessary for the average American to cut back his or her standard of living, or do you feel that major energy savings can be made in this country without cutting back the average American's lifestyle?

Cutbacks necessary	48%
Save energy without cutbacks	50
Don't know	2

Base: Total sample

Table 3: Another way to look at energy conservation is efficiency versus cutbacks. One way to save energy would be by cutbacks in lifestyles and standards of living. Another way would be improved efficiency—doing the same thing using less energy to do it. If this country makes major energy savings, about how much do you feel would come from each of these areas?

	Cutbacks in Living Standards	Improved Efficiency
Great or good deal	30%	58%
Great deal	12	30
Good deal	18	28
Fair amount	43	29
Not too much or none	23	8
Not too much	20	7
None	3	1
Don't know	4	5

Base: Total sample

In considering the impact of saving energy through cutbacks in standards of living, however, sacrifices will have to be made. Most Americans believe that sacrifices will be unevenly distributed across the population (Table 4).

Table 4: Suppose this country did save a good deal of energy and that cutbacks in the standard of living and lifestyles came along with this. Is it your feeling that cutbacks in living standards and lifestyles would be about equal for almost everyone, or do you feel that a large number of people and groups would be favored over others?

Cutbacks about equal	22%
Favored people or groups	74
Don't know	4

Base: Total sample

In summary, Americans agree on the need to reduce the nation's energy use and expect efficiency improvements to achieve much of this saving. They continue to see a role for cutbacks in standards of living, however, and express concern for the equity with which these sacrifices will be distributed.

2 How does conservation rank against alternative solutions?

Although Americans agree on the need to reduce energy use, the depth of their support can only be gauged by asking them to compare conservation to other ways to improve the nation's energy situation. In a general question (Table 5), conservation ("saving energy") ranked behind solar energy and coal, clustered with oil and natural gas, and synthetic energy, but placed slightly ahead of nuclear.

Table 5: If this country makes a major effort to improve its energy situation, which one or two of these things do you feel it should depend on most?

Solar energy	38%
Coal	29
Saving energy	21
Oil and natural gas	20
Synthetic energy	20
Nuclear energy	16
Don't know	2

Note: Figures add to more than 100% because some respondents gave more than one answer.

Base: Total sample

Significantly, none of the listed choices above achieves a majority. This suggests that Americans support a pluralistic approach to the nation's energy future, without undue reliance on any single alternative.

When Americans are asked to make comparisons between conservation and other energy strategies with regard to speed, economy and environmental impact, conservation's ranking improves significantly. Conservation is widely regarded as the fastest way to improve the country's energy situation (Table 6), well ahead of coal, oil and natural gas, and solar—all of which tie for a distant second. In ranking conservation fastest, Americans' perceptions are consistent with the conclusions of most energy analysts.

Table 6: Now thinking about fast results. Which one or two of these things do you feel could help improve this country's energy situation the fastest?

Saving energy	36%
Coal	23
Oil and natural gas	21
Solar energy	20
Nuclear energy	14
Synthetic energy	10
Don't know	2

Note: Figures add to more than 100% because some respondents gave more than one answer.

Base: Total sample

Most energy analysts believe conservation is the least expensive energy strategy. But in the public's thinking, it ties with solar and coal (Table 7).

Table 7: Now thinking about spending. Which one or two of these things do you feel could help to substantially improve this country's energy situation for the least money?

Saving energy	32%
Solar energy	31
Coal	29
Oil and natural gas	14
Synthetic energy	9
Nuclear energy	8
Don't know	3

Note: Figures add to more than 100% because some respondents gave more than one answer.

Base: Total sample

The powerful appeal of solar energy is also evident in the public's ranking of these alternatives in terms of which pose the least threat of damage to the environment (Table 8). Conservation scores a distant second to solar, although it ranks well ahead of all other sources.

Table 8: Now thinking about the environment. Which one or two of these things do you feel could help improve this country's energy situation with the least damage to the environment and health?

Solar energy	50%
Saving energy	30
Oil and natural gas	17
Synthetic energy	11
Coal	10
Nuclear energy	8
Don't know	2

Note: Figures add to more than 100% because some respondents gave more than one answer.

Base: Total sample

In summary, Americans support a pluralistic approach to the nation's energy future without undue reliance on any single energy alternative. Conservation is considered the fastest way to improve the nation's energy situation and is seen as one of the cheapest and most environmentally acceptable of the nation's energy options. Its overall rating puts it in the middle of six alternatives measured.

3 How could homeowners be encouraged to conserve more energy?

If Americans have such an appetite for conservation and rank it so well in terms of speed, economy, and environmental impact, why did the energy efficiency of the residential sector improve only five percent between 1973 and 1978? What conservation investments do homeowners report having made? What induced them to do so? Since the residential sector uses 22 percent of the energy consumed in the U.S., answers to these questions are critical for policymakers.

Of the homeowners in the survey, 82 percent said they had executed one or more projects to improve the energy efficiency of their home in the past two years. Table 9 shows the projects they report having done.

Table 9: I am going to read some items and ask if each one has been done to your home in the past two years—since October, 1977.

	Homeowners
Said they have executed one or more projects to improve energy efficiency of their home	**82%**
Listed Items	
Used caulking, weatherstripping, or other materials to stop air leaks	65
Installed or added insulation in a roof or ceiling or added insulation in walls or floors	43
Installed storm windows or storm doors	38
Installed a more efficient boiler or made your existing boiler more efficient by adding a part to prevent heat loss	25
Installed replacement windows with double glass or thermopane	17
Had an energy audit conducted or had an expert tell you how to improve the energy efficiency in your home	15
Installed siding	11
Installed solar energy to heat all or part of your home or make hot water	2

Base: Homeowners

Seventy-nine percent of homeowners said they were aware of the $300 tax credit available for home conservation projects and 60 percent said they were aware of the $2,000 tax credit for installing solar or other "renewable energy" devices. But only three percent of homeowners who reported having completed an energy efficiency project in the past two years said the $300 credit had been "extremely important" in their decision. (Table 10). No one in this group considered the solar credit "extremely important".

Table 10: How important, if at all, was the government's energy tax credit as a reason for your going ahead with the project or projects we just discussed? How important, if at all, was the government's tax credit as a reason for your going ahead with the solar energy heating or hot water project we just discussed?

Said appropriate tax credit program was extremely important in making decision to conduct energy efficiency project	
$300 energy tax credit	3%
$2,000 solar energy credit	–

Base: Homeowners reporting energy efficiency project in past two years

This suggests that present tax credits—while widely known—are of little actual consequence in homeowners' decisions to spend money on energy conservation projects.

Despite the poor record of existing tax credit incentives, the general concept of government assistance for residential conservation investments has broad support (Table 11).

Table 11: Generally speaking, are you inclined to favor or oppose government programs that help homeowners pay for the cost of improving the energy efficiency of their homes?

Favor	71%
Oppose	25
Don't know	4

Base: Total sample

Given this strong general support for government programs to help homeowners pay for the costs of improving the energy efficiency of their homes, could a more effective incentive program for residential energy conservation be designed? Forty-four percent of the homeowners in the sample said their homes were already as energy efficient at they could be (Table 12). But 54 percent felt more could be done to improve the efficiency of their homes, making them prime candidates to be influenced by new incentives.

Table 12: Not including any work you plan to do or that is not yet finished; would you say that at the present time the house you are living in is basically as energy efficient as it can be, or do you feel that more can be done to improve its energy efficiency?

	Homeowners
Home is now as energy efficient as it can be	44%
More can be done to make home energy efficient	54
Don't know	2

Base: Homeowners

The group who felt more could be done in their homes said that the *cost* of conservation investments was the most important reason they hadn't acted (Table 13).

Table 13: I will read down a list of reasons why some people have not done more to improve the energy efficiency of their homes. Thinking about your own home only, are you inclined to agree or disagree?

	Agree	Disagree	Don't Know
Can't afford it	76%	23%	1%
Projects won't save as much as they will cost	38	56	5
House is nearly as energy efficient as it can be	26	72	2
Can't find an honest and competent firm to do the work	18	76	6
Don't really care	4	94	2

Base: Homeowners who do not feel their home is as energy efficient as it can be

One objective of the survey was to test homeowners' response to a program providing them with a $750 grant to spend on home conservation. The survey design recognized that such an incentive would induce two types of responses: it might increase the expenditures of homeowners who were already planning to invest in conservation, and it might also motivate homeowners who had no current plans to take action.

The homeowners in the sample were separated according to whether or not they already had plans to improve the energy efficiency of their homes in the next six to nine months. Twenty-one percent of the homeowners had such plans, while 79 percent did not. Of the homeowners already planning action, nearly eight in ten said they would use the $750 incentive to increase their investment in conservation (Table 14). Projected to total homeowners, this means 17 percent are prospects for increasing their investment as a result of the incentive.

Table 14: Suppose the federal government made up to $750 available in grants to homeowners that spent money on projects to improve the energy efficiency of their homes. Would you use this money to increase the amount you are now planning to spend improving the energy efficiency of your home, or would you be inclined to keep this savings or spend it on something else?

	Homeowners Planning Conservation Program	Projected to All Homeowners
Use for more energy efficiency	79%	17%
Keep or spend on something else	11	2
Don't know	10	2
Not asked because not planning to spend for energy efficient project	-	79
Base: Listed above		

Homeowners *not* currently planning conservation investments were asked about three cases in which the $750 incentive represented an increasingly large reimbursement (Table 15). In Case 1, where the incentive equates to a 25 percent reimbursement, nine percent of these homeowners indicated they would be good prospects to invest in conservation, which projects to seven percent of all homeowners. In Case 3, however, where the $750 incentive equates to a reimbursement of 75 percent, 29 percent of homeowners not planning a conservation investment indicated they would be good prospects to invest in conservation, which projects to 23 percent of all homeowners. This means that in Case 3, a total of 40 percent of American homeowners could become candidates for new or expanded conservation investments—the 23 percent of all homeowners who would be good prospects for *new* projects (Table 15) plus the 17 percent of all homeowners who would be prospects for using a $750 grant to *expand* planned projects (Table 14).

Table 15: Suppose the government were to make payments of $750 available to homeowners who spend a minimum of (amount) improving the energy efficiency of their homes. If this $750 were made available by the government, would you spend a minimum of (amount) to improve the energy efficiency of your home?

	Case 1: $750 cash grant when $3,000 is spent; incentive = 25%	Case 2: $750 cash grant when $2,000 is spent; incentive = 38%	Case 3: $750 cash grant when $1,000 is spent; incentive = 75%
Definitely	9% (7%)	14% (11%)	29% (23%)
Probably	12 (10)	18 (14)	25 (19)
Possibly	15 (12)	17 (14)	16 (13)
Probably not	26 (21)	22 (17)	11 (9)
Definitely not	33 (26)	27 (21)	16 (13)
Don't know	5 (4)	3 (2)	4 (3)

Base: Homeowners not planning energy projects within the next six to nine months

Note: Figures in parenthesis represent projections to *all* homeowners.

To summarize, homeowners say that cost is the single most important obstacle they face in improving the energy efficiency of their homes and that the present $300 tax credit program has had little offsetting effect. Up to 40 percent of America's homes could be candidates for significant new or expanded conservation investments if an incentive of $750 is provided.

4 What role do Americans see for industry in energy conservation?

Substantial majorities of Americans feel that large corporations, the federal government, and the average person will help improve the nation's energy efficiency (Table 16). A majority believes that the cost of energy, rather than government regulation, will induce industry to use less energy on its own (Table 17).

Table 16: Thinking about any steps that may be taken toward conserving energy through improved energy efficiency in the next several years. How helpful do you think each of these will be in efforts this country makes to improve energy efficiency?

	Large Corporations	The Average Person	Federal Government
Helpful	**68%**	**77%**	**65%**
Very helpful	29	28	24
Somewhat helpful	40	49	40
Not helpful	**28**	**22**	**32**
Not too helpful	21	18	20
Not at all helpful	7	4	12
Don't know	**4**	**2**	**3**

Base: Total sample

Table 17: Is it your feeling that it will be necessary to have government regulations that require American industry to use less energy to produce the average product, or is it your feeling that the cost of energy will lead American industry to use less energy on its own?

Government regulations necessary	41%
Industry will do so on its own	53
Don't know	6

Base: Total sample

Although they believe the cost of energy will lead American industry to conserve energy, almost half of the American public sees a role for government in helping corporations pay for making their operations more energy efficient (Table 18). The public is almost equally divided on this question, in contrast to strong support for aid to homeowners reported in Section 3.

Table 18: Generally speaking, are you inclined to favor or oppose government programs that help corporations pay for the cost of making their operations more energy efficient?

Favor	48%
Oppose	47
Don't know	5

Base: Total sample

Of those Americans favoring assistance to business, 76 percent think that government should help pay for at least a quarter of such expenditures by business (Table 19).

Table 19: Are you inclined to feel these programs should help pay for about one half of the costs corporations spend on making their operations more energy efficient or about one quarter of these costs, or less than that?

About one half	21%
About one quarter	55
Less	19
Don't know	5

Base: Those favoring government programs to help corporations pay for the costs of making their operations more energy efficient in Table 18

Approaching the issue somewhat differently, respondents were asked about methods of paying for large energy conservation investments by corporations. A narrow majority supports methods that don't penalize profits (Table 20). Eight percent favor letting companies raise their prices to cover such expenditures, while 43 percent prefer reducing companies' taxes—a total of 51 percent.

Table 20: Suppose a company spent a great deal more to save energy than it normally would and that there were three possible ways to pay for this—increasing the prices of their products, reducing their profits, or having them pay lower taxes. Which would you prefer?

Increase prices	8%
Reduce profits	45
Reduce company's taxes	43
Don't know	3

Base: Total sample

A separate survey conducted in February, 1980 offered a second opportunity to test the strength of the public's support for government incentives for industrial conservation by repeating the question reported in Table 18 (Table 21). Here, as in the earlier study, significant public support was demonstrated, although direct comparisons between the November and February data are invalid because of differences in the contexts in which the questions appeared.

Table 21: Generally speaking, are you inclined to favor or oppose government programs that help corporations pay for the costs of making their operations more energy efficient?

Favor	57%
Not in favor	43
Oppose	39
Don't know	4

Note: Asked in February, 1980

Base: Total sample

More than half of the 43 percent who did not favor government assistance to corporations (Table 21) said they would favor such assistance if it substantially increased the amount of energy corporations actually save (Table 22). This means that if this condition is met, a total of 80 percent of all Americans would favor government programs to help business pay for energy conservation projects (the 57 percent who initially favored such assistance and about half of the 43 percent who initially did not).

Table 22: If you knew that corporations were not conserving as much energy today as they could because of the lack of money to pay for conservation projects, and if you also knew that government programs to help them pay some of this cost would substantially increase the amount of energy that corporations would actually save, would you then be inclined to favor or oppose such government programs?

Favor	54%
Oppose	41
Don't know	5

Note: Asked in February, 1980

Base: Those not in favor of government programs in Table 21

In summary, Americans feel that industry as well as government and themselves will help conserve energy. A majority believes that energy prices, rather than government regulation, will induce industry to save energy. But a majority would support government incentives for industrial conservation if they were convinced such incentives would induce substantial new conservation by industry.

APPENDIX

This appendix contains charts with the question wording and results for the survey. Questions are reported in the same order as they were asked in interviews.

All data are from the November survey, with the exception of data reported in Charts 32 and 33. Chart 32 covers a question originally asked in the November survey and then repeated in a survey conducted between February 2 and 10, 1980 among a national probability sample of 1,000 adults. Chart 33 reports a question asked only in February.

Because of rounding, percentages may add to one percentage point more or less than 100%, and some subtotals may add to one percentage point more or less than totals. At the 95% confidence level, sampling error for individual figures based on total sample does not exceed three percentage points; for figures based on all homeowners, sampling error does not exceed four percentage points.

CHART 1

Generally speaking, would you say that things are going extremely well in this country, pretty well, pretty badly, or very badly?

Extremely well	1%
Pretty well	35
Pretty badly	45
Very badly	17
Don't know	2

Base: Total sample

CHART 2

Thinking about the energy situation, are you more concerned about the cost of oil and gas, or are you more concerned about not being able to get enough oil and gas?

Cost	45%
Not getting enough	38
Neither, both equal	15
Don't know	2

Base: Total sample

CHART 3

What would you say are the most important good things that happen when energy is saved? Or to put that another way, what would you say are the important good results when energy is saved? (Respondents answered in their own words.)

More energy available for the future	47%
Prices will come down	26
Reduction of imports of foreign oil	10
Everyone profits, helps people	7
Good for the economy	6
Less air pollution	4
Specific ways of saving energy named	3
Oil companies will make less profit	*
All other comments	2
No good results when energy is saved	2
Don't know	21

*Less than .5%
Base: Total sample

CHART 4

What would you say are the most important negative things that happen when energy is saved? Or to put that another way, what would you say are the important negative results when energy is saved? (Respondents answered in their own words.)

Deprivation, lower standard of living, life-style change (net)	**29%**
Prices go up	8
Slow down business, add to inflation, decrease production, unemployment	7
Travel cut down, leisure time activities cut	6
People will be cold, may become ill	6
Make it tough on people, may hurt some people	5
Lower standards of living, lifestyles changes	4
Environmental problems (net)	**1**
Coal burning adds to pollution	1
Wood burning adds to pollution, hurts forests	1
All other comments	3
No bad results when energy is saved	27
Don't know	41

Base: Total sample

CHART 5

Is it your feeling that this country in future years should reduce the amount of energy it uses a great deal, a good deal, a fair amount, not too much, or not at all?

Great or good deal	**48%**
Great deal	27
Good deal	21
Fair amount	**35**
Not too much or not at all	**15**
Not too much	7
Not at all	7
Don't know	**3**

Base: Total sample

CHART 6

I want to ask you about where energy savings should come from if such savings are made in this country. If energy savings are made, is it your feeling that the amount of energy used by (NAME ITEM) should be reduced a great deal, a good deal, a fair amount, not too much, or not at all?

	Private Homes	Private Cars	Office Buildings	Apartment Buildings	Factories & Plants
Great or good deal	29%	50%	41%	26%	34%
Great deal	12	27	19	12	17
Good deal	17	23	21	15	17
Fair amount	54	37	47	52	44
Not too much or not at all	15	11	11	19	19
Not too much	10	7	8	14	14
Not at all	5	4	3	4	4
Don't know	2	2	2	3	4

	Stores & Shopping Centers	Transportation for Business	Government Buildings	Transportation for Government
Great or good deal	50%	35%	51%	63%
Great deal	26	16	29	41
Good deal	24	19	22	22
Fair amount	41	42	38	25
Not too much or not at all	8	20	10	8
Not too much	6	12	6	6
Not at all	2	8	3	3
Don't know	1	3	2	4

Note: Items systematically rotated in interviews
Base: Total sample

CHART 7

Thinking about how to cut back on the use of gasoline. Suppose the choices are reducing gasoline use by rationing or reducing gasoline use by having people pay more for it, either through higher prices or taxes. Would you favor rationing or having people pay more for gasoline?

Rationing	67%
Pay more	31
Don't know	3

Base: Total sample

CHART 8

Is it your feeling that major savings in energy use in this country would make it necessary for the average American to cut back his or her standard of living, *or* do you feel that major energy savings can be made in this country without cutting back the average American's lifestyle?

Cutbacks necessary	48%
Save energy without cutbacks	50
Don't know	2

Base: Total sample

CHART 9

Do you feel that the average American's lifestyle would have to be cut back a great deal, a good deal, a fair amount, or very little?

Great or good deal	32%
Great deal	14
Good deal	18
Fair amount	54
Very little	13
Don't know	1

Base: The 48% of the public who feel cutbacks in lifestyles necessary

CHART 10

Suppose this country did save a good deal of energy and that cutbacks in the standard of living and lifestyles came along with this. Is it your feeling that cutbacks in living standards and lifestyles would be about equal for almost everyone, *or* do you feel that a large number of people and groups would be favored over others?

Cutbacks about equal	22%
Favored people or groups	74
Don't know	4

Base: Total sample

CHART 11

Another way to look at energy conservation is efficiency versus cutbacks. One way to save energy would be by cutbacks in lifestyles and standard of living. Another way would be improved efficiency—doing the same thing using less energy to do it. If this country makes major energy savings, about how much do you feel would come from each of these areas? First, (NAME ITEM). Is it your feeling that a great deal, good deal, fair amount, not too much, or none of such energy savings will come from (NAME ITEM)? Next, (NAME OTHER ITEM). Is it your feeling that a great deal, a good deal, fair amount, not too much, or none of such energy savings come from (NAME OTHER ITEM)?

	Cutbacks in Living Standards	Improved Efficiency
Great or good deal	30%	58%
Great deal	12	30
Good deal	18	28
Fair amount	43	29
Not too much or none	23	8
Not too much	20	7
None	3	1
Don't know	4	5

Note: Items systematically rotated in interviews
Base: Total sample

CHART 12

Now thinking about where such energy savings *should* come from. Is it your feeling that a great deal, good deal, a fair amount, not too much, or none of such energy savings *should* come from (NAME ITEM)?

	Cutbacks in Living Standards	Improved Efficiency
Great or good deal	27%	66%
Great deal	10	38
Good deal	17	28
Fair amount	48	25
Not too much or none	22	5
Not too much	17	4
None	6	1
Don't know	4	4

Note: Items systematically rotated in interviews
Base: Total sample

CHART 13

Thinking about any steps that may be taken toward conserving energy through improved energy efficiency in the next several years. Is it your feeling that (NAME ITEM) will be very helpful, somewhat helpful, not too helpful, or not at all helpful in efforts this country makes to improve energy efficiency?

	Large Corporations	The Average Person	Federal Government
Helpful	68%	77%	65%
Very helpful	29	28	24
Somewhat helpful	40	49	40
Not helpful	28	22	32
Not too helpful	21	18	20
Not at all helpful	7	4	12
Don't know	4	2	3

Note: Items systematically rotated in interviews
Base: Total sample

CHART 14

Is it your feeling that (NAME ITEM) will be very helpful, somewhat helpful, not too helpful, or not at all helpful in efforts this country makes to improve energy efficiency?

	Companies that:		
	Use a Great Deal of Energy	Produce Energy	All Other Companies
Helpful	68%	68%	79%
Very helpful	24	28	18
Somewhat helpful	44	40	61
Not helpful	29	29	17
Not too helpful	24	21	14
Not at all helpful	5	8	3
Don't know	3	3	5

Note: Items systematically rotated in interviews
Base: Total sample

CHART 15

Is it your feeling that it will be necessary to have government regulations that require American industry to use less energy to produce the average product, *or* is it your feeling that the cost of energy will lead American industry to use less energy on its own?

Government regulations necessary	41%
Industry will do so on its own	53
Don't know	6

Base: Total sample

CHART 16

Suppose a company spent a great deal more to save energy than it normally would and that there were three possible ways to pay for this – increasing the prices of their products, reducing their profits, or having them pay lower taxes. Which would you prefer – increasing the company's prices, or reducing the company's profits, or reducing the company's taxes?

Increase prices	8%
Reduce profits	45
Reduce company's taxes	43
Don't know	3

Base: Total sample

CHART 17

Have you heard of a government program that allows a tax credit of up to $300 for money spent to make a home more energy efficient, *or* have you not heard of this specific program?

Heard of	79%
Did not	21
Don't know	-

Note: Questions reported in Charts 17-18 were systematically rotated in interviews.

Base: Homeowners

CHART 18

Have you heard of a government program that allows a tax credit of up to $2,000 for projects that convert the heating of a home to renewable energy sources like solar energy, *or* have you not heard of this specific program?

Heard of	60%
Did not	39
Don't know	1

Note: Questions reported in Charts 17-18 were systematically rotated in interviews.

Base: Homeowners

CHART 19

I am going to read some items and ask if each one has been done to your home in the past two years—since October, 1977. Bear in mind I am only asking about the *past* two years. (NAME ITEM) Has this been done to your home within the past two years, or was it *not* done within the past two years? In addition to the list I just read, has anything else been done to your home within the past two years to improve its energy efficiency? (IF "YES":) What would that be?

Said they have executed one or more projects to improve energy efficiency of their home	**82%**
Listed Items	
Used caulking, weatherstripping, or other materials to stop air leaks	65
Installed or added insulation in a roof or ceiling or added insulation *in* walls or floors	43
Installed storm windows or storm doors	38
Installed a more efficient boiler or made your existing boiler more efficient by adding a part to prevent heat loss	25
Installed replacement windows with double glass or thermopane	17
Had an energy audit conducted or had an expert tell you how to improve the energy efficency in your home	15
Installed siding	11
Installed solar energy to heat all or part of your home or make hot water	2
Volunteered items	
Wood—stoves, furnaces, fireplaces	7
Aids to save on air conditioning	2
Improve water heater efficiency	2
Coal—stoves, furnaces	*
All other responses	6

*Less than .5%

Note: Listed items systematically rotated in interviews

Base: Homeowners

CHART 20

How important, if at all, was the government's tax credit as a reason for your going ahead with the project or projects we just discussed? Was this up to $300 tax credit an extremely important reason, very important, somewhat important, somewhat unimportant, very unimportant, or extremely unimportant? How important, if at all, was the government's tax credit as a reason for your going ahead with the solar energy heating or hot water project we just discussed? Was this up to $2,000 tax credit an extremely important reason, very important, somewhat important, somewhat unimportant, very unimportant, or extremely unimportant?

	$300 Tax Credit Program	Solar Tax Credit Program
Important	28%	1%
Extremely important	3	-
Very important	9	1
Somewhat important	16	*
Not important	48	1
Somewhat unimportant	17	*
Very unimportant	13	-
Extremely unimportant	18	*
Don't know	3	*
Not asked because not aware of listed tax credit program or, for solar credit only, did not report solar energy project	21	98

*Less than .5%

Base: Homeowners reporting energy efficiency project in past two years

CHART 21

In total, about how much have you spent on the project or projects we have discussed to improve your home's energy efficiency in the past two years?

Less than $250	32%
$250 to $500	19
$501 to $1,000	12
$1,001 to $1,500	8
$1,501 to $2,500	8
$2,501 to $3,500	7
More than $3,500	7
Don't know	7

Base: Homeowners reporting energy efficiency project in past two years

CHART 22

Not including any work you plan to do or that is not yet finished. Would you say that at the present time the house you are living in is basically as energy efficient as it can be, *or* do you feel that more can be done to improve its energy efficiency?

Home is now as energy efficient as it can be	44%
More can be done to make home energy efficient	54
Don't know	2

Base: Homeowners

CHART 23

I will read down a list of reasons why some people have not done more to improve the energy efficiency of their homes. (NAME ITEM) Thinking about your own home only, are you inclined to agree or disagree?

	Agree	Disagree	Don't Know
Can't afford it	76%	23%	1%
Projects won't save as much as they will cost	38	56	5
House is nearly as energy efficient as it can be	26	72	2
Can't find an honest and competent firm to do the work	18	76	6
Don't really care	4	94	2

Note: Items systematically rotated in interviews

Base: Homeowners who do not feel home is as energy efficient as it can be

CHART 24

Thinking only about the next six to nine months, do you have a definite plan to complete a project or projects that will make your home more energy efficient?

Yes	21%
No	34
Don't know	1
Not asked because considered house as energy efficient as possible	44

Base: Homeowners

CHART 25

Please tell me what this project or projects will be—what will be done to make your home more energy efficient? (Respondents answered in their own words.)

Install or add insulation in walls, roof, attic, or ceiling	52%
Install storm windows, storm doors	22
Use caulking, weatherstripping, other material to stop air leaks	17
Install double glass windows or thermopane	9
Use wood—stoves, furnaces, fireplaces	7
Install new, more efficient furnace or add a part to control heat loss in existing unit	4
Use of solar energy for heating homes or making hot water	4
Use aids to save on air conditioning	4
Install siding	4
All other plans	6

Base: Homeowners planning to complete an energy project for their home within the next nine months

CHART 26

In total, how much are you planning to spend on the work you just described?

Less than $250	22%
$250 to $500	22
$501 to $1,000	25
$1,001 to $1,500	9
$1,501 to $2,500	3
$2,501 to $3,500	4
More than $3,500	4
Don't know	11

Base: Homeowners planning an energy efficiency project for their home within the next nine months

CHART 27

Suppose the federal government made up to $750 available in grants to homeowners that spent money on projects to improve the energy efficiency of their homes. Would you use this money to increase the amount you are now planning to spend improving the energy efficiency of your home, *or* would you be inclined to keep this savings or spend it on something else?

	Homeowners	Homeowners Planning Conservation Program
Use for more energy efficiency	17%	79%
Keep or spend on something else	2	11
Don't know	2	10
Not asked because not planning to spend for energy efficiency project	79	

Base: Listed above

CHART 28

Suppose the government were to make payments of $750 available to homeowners who spend a minimum of (amount) improving the energy efficiency of their homes. If this $750 were made available by the government, would you definitely, probably, possibly, probably not, or definitely not spend a minimum of (amount) to improve the energy efficiency of your home?

	$750 cash grant when $3,000 is spent incentive = 25%	$750 cash grant when $2,000 is spent incentive = 38%	$750 cash grant when $1,000 is spent incentive = 75%
Definitely	9%	14%	29%
Probably	12	18	25
Possibly	15	17	16
Probably not	26	22	11
Definitely not	33	27	16
Don't know	5	3	4

Base: Homeowners not planning energy projects within the next six to nine months

CHART 29

Suppose the government were to make payments of $750 available to homeowners who spend a minimum of (amount) improving the energy efficiency of their homes. If this $750 were made available by the government, would you definitely, probably, possibly, probably not, or definitely not spend a minimum of (amount) to improve the energy efficiency of your home?

	$750 cash grant when $3,000 is spent incentive = 25%	**$750 cash grant when $2,000 is spent incentive = 38%**	**$750 cash grant when $1,000 is spent incentive = 75%**
Definitely	7%	11%	23%
Probably	10	14	19
Possibly	12	14	13
Probably not	21	17	9
Definitely not	26	21	13
Don't know	4	2	3
Not asked because planning energy efficient project	21	21	21

Base: Homeowners

CHART 30

Generally speaking, are you inclined to favor or oppose government programs that help pay for the costs that homeowners spend on improving the energy efficiency of their homes?

Favor	71%
Oppose	25
Don't know	4

Base: Total sample

CHART 31

Generally speaking, are you inclined to feel these programs should help pay for about half of the costs that homeowners spend on improving the energy efficiency of their homes, or about one quarter of these costs, or less than that?

About one half	43%
About one quarter	42
Less	10
Don't know	5

Base: The 71% of the public who favor government programs that help pay for the costs that homeowners spend on improving the energy efficiency of their homes

CHART 32

Generally speaking, are you inclined to favor or oppose government programs that help corporations pay for the costs of making their operations more energy efficient?

	11/79	**2/80**
Favor	48%	57%
Oppose	47	39
Don't know	5	4

Base: Total sample

CHART 33

If you knew that corporations were not conserving as much energy today as they could because of the lack of money to pay for conservation projects, *and* if you also knew that government programs to help them pay some of this cost would substantially increase the amount of energy that corporations would actually save, would you *then* be inclined to favor or oppose such government programs?

	2/80
Favor	54%
Oppose	41
Don't know	5

Base: The 43% of the public not in favor of government programs that help corporations pay for the costs of making their operations more energy efficient in the 2/80 survey

CHART 34

Are you inclined to feel these programs should help pay for about one half of the costs corporations spend on making their operations more energy efficient, or about one quarter of these costs, or less than that?

About one half	21%
About one quarter	55
Less	19
Don't know	5

Base: The 48% of the public who favored government programs that help corporations pay for the costs of making their operations more energy efficient in the 11/79 survey

CHART 35

Some people have said that insulating a home generally saves more energy than any other specific major project such as putting in storm windows or putting up siding. Are you inclined to agree of disagree with this?

Agree	78%
Disagree	13
Don't know	9

Base: Total sample

CHART 36

If this country makes a major effort to improve its energy situation, which one or two of these things do you feel it should depend on most—oil and natural gas, or synthetic energy, or saving energy, or nuclear energy, or coal, or solar energy?

Solar energy	38%
Coal	29
Saving energy	21
Oil and natural gas	20
Synthetic energy	20
Nuclear energy	16
Don't know	2

Note: Figures may add to more than 100% because some respondents gave more than one answer.

Base: Total sample

CHART 37

Now thinking about fast results. Which one or two of these things do you feel could help improve this country's energy situation the *fastest*—oil and natural gas, or synthetic energy, or saving energy, or nuclear energy, or coal, or solar energy?

Saving energy	36%
Coal	23
Oil and natural gas	21
Solar energy	20
Nuclear energy	14
Synthetic energy	10
Don't know	2

Note: Figures may add to more than 100% because some respondents gave more than one answer.

Base: Total sample

CHART 38

Now thinking about spending. Which one or two of these things do you feel could help to substantially improve this country's energy situation for the *least* money—oil and natural gas, or synthetic energy, or saving energy, or nuclear energy, or coal, or solar energy?

Saving energy	32%
Solar energy	31
Coal	29
Oil and natural gas	14
Synthetic energy	9
Nuclear energy	8
Don't know	3

Note: Figures may add to more than 100% because some respondents gave more than one answer.

Base: Total sample

CHART 39

Now thinking about the environment. Which one or two of these things do you feel could help improve this country's energy situation with the *least damage* to the environment and health—would it be oil and natural gas, or synthetic energy, or saving energy, or nuclear energy, or coal, or solar energy?

Solar energy	50%
Saving energy	30
Oil and natural gas	17
Synthetic energy	11
Coal	10
Nuclear energy	8
Don't know	2

Note: Figures may add to more than 100% because some respondents gave more than one answer.

Base: Total sample

CHART 40

The number of persons interviewed in the listed groupings:

TOTAL		1,000
Region	Northeast	235
	Midwest	273
	South	325
	West	167
Sex	Male	480
	Female	520
Age	18-34	393
	35-54	327
	Over 55	280
Education	Less	146
	High school graduate	407
	Some college	175
	College graduate	193
	Graduate school	73
	Refused	6
Total household income	$ 7,500 or less	137
	7,501-12,500	143
	12,501-20,000	234
	Over $20,000	406
	Refused	80
Race	White	870
	Other	114
	Refused	16
Home ownership	Home owned, and head of household or married to head of household	681
	Other	319
Political inclination	Liberal	245
	Moderate	310
	Conservative	427
	Don't know	18
Political party	Democrat	421
	Republican	211
	Independent	331
	All other, refused, don't know	37